

Bologna Airport as multimodal hub case

Agency Research Team (ART) workshop on passenger-centred mobility
Day 3 - June 16, 2021



Bologna as Sustainable Destination

Mobility
&
Sustainability

Airport
role

Stakeholders
&
Shareholders

Good for
business

Multimodal transport for people and freights is a key element of sustainable mobility.

A range of solution is able to attract people and encourage them to move in a more sustainable way.

In the "**nudge**" **mechanism**" (or gentle push) the choice architect is offering alternatives able to influence people's behaviour, without forbidding.

Airports, thanks to its nature and "weight" in term of influence, can act as "**choice architect**".



https://en.wikipedia.org/wiki/Nudge_theory

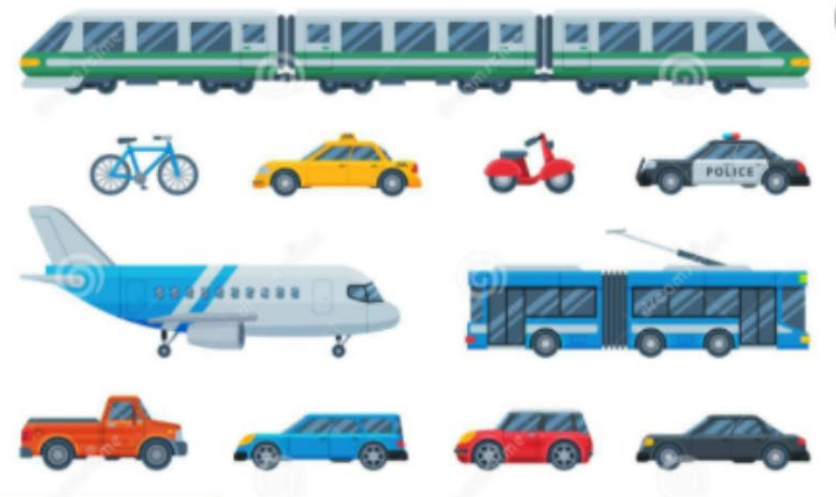
An aerial photograph of a city, likely Rome, showing a dense urban area with many buildings and a large, green, hilly area in the background. A large, solid yellow circle is centered over the image, containing the text "Airport role". In the top left corner, there is a teal-colored curved shape. In the bottom left corner, there is a small logo for "Prezi".

Airport role

Airports are strategic hubs where **multimodality can be boosted** as they are well connected and therefore part of a network of networks.

Airports are important actors of mobility in the territory and their commitment can **trigger an alliance** among different transport operators, so to be able to offer **not only a multimodal but also an integrated system**.

It will simplify the people's travel experience, making the door-to-door journey more attractive and “seamless”.





Stakeholders & Shareholders

Airport main Stakeholders are both inside and outside the airport: local and national governmental bodies (who often are also Shareholders), handlers, employees, suppliers, passengers and investors

Environmental, social, and governance (ESG) issues have traditionally been ignored by many of them. We are **facing an "evolution"**.

In recent years, also Shareholders and institutional investors are **more and more interested to consider the environmental and social impact of their portfolios**. And most governmental bodies revised their policies and objectives including ESG.



from Bologna Airport DNF 2020 - www.bologna-airport.it

Sha

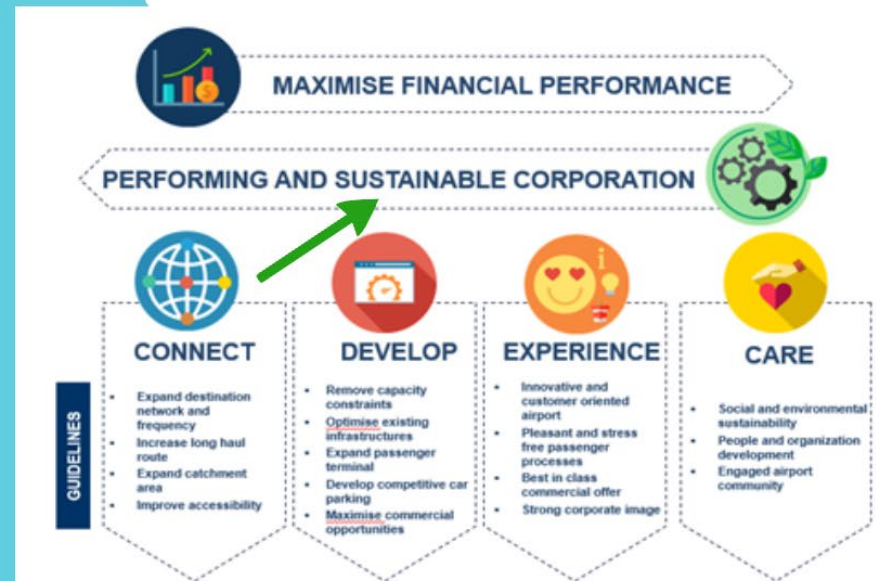
Good for
business

Sustainability is **a must, not a "nice to have"**: important for stakeholders but more and more for shareholders. So important for climate but also to ensure **attractiveness for business and investments**.

Regional airports can widen their catchment areas offering to passengers the possibility to choose a **more sustainable way of travel** along the whole transport chain.

Sustainable practices lead **to greater social credibility, attract talent, boost employee morale, and build stronger community relations**.

And **may lead to government support, subsidies, overcoming increasing regulatory pressure and better investor relations**, e.g., in form of **better loan conditions or lower capital costs**.



Bologna Airport Strategy 2019 - DNF



Bologna Airport MaaS Pilot



Bus &
Airport
Shuttle



Suburban
Light Rail



People
Mover



Costs &
Next Steps

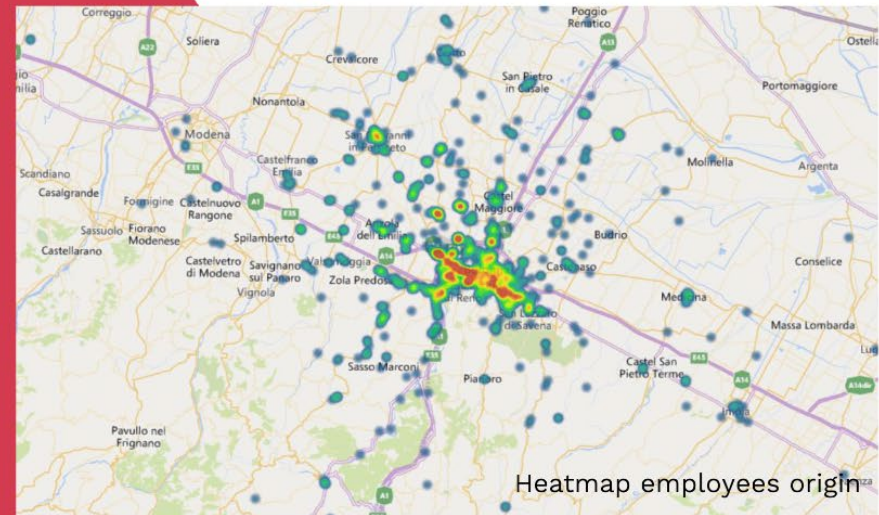
E-car
Sharing



First **analysis** was conducted about the geographical distribution of employees on the territory, to understand most suitable solution of public transport.

The bus network covers the Bologna Greater Area. **All the bus lines** (urban, sub- and extra-urban) **are included** in the annual ticket.

The public transport operator manages the regional platform for integrated ticketing system. **Bologna Airport created synergies with local excellence.**



port
uttle

per

ggeri Emilia-Romagna

Suburban Light Rail

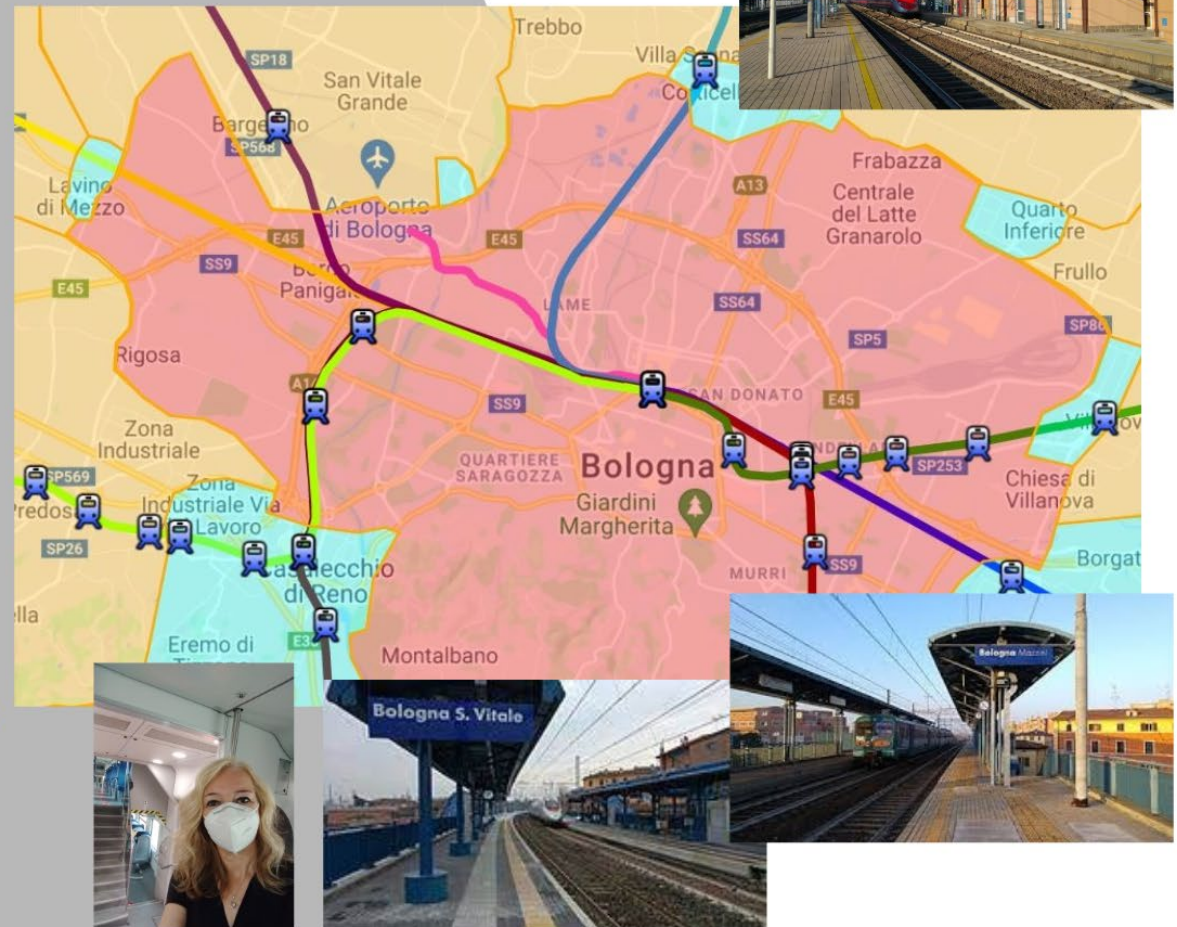
T>per

Trasporto Passeggeri Emilia-Romagna

Bologna has several lines of **metropolitan railway service**. All these lines are included in the MaaS ticket to allow commuting by train from areas outside the city till the Central Railway Station, core node of high speed train in Italy.

The travel time is **very short and safe, not affected by congestion** and peak hour traffic on the road.

Tourists visiting the surroundings can also have a useful and easy link back to Railway Station and Airport.



People Mover



marconi express

The Marconi Express is a mass rapid transport system known as “People Mover”. It links Bologna Airport and Central Railway Station, where also high speed train are available. The goal is to create a comfortable, fast and frequent connection to the city and also to **expand Bologna airport catchment area** by making its flight offer “within train reach”. Its launch in February 2020 was a **disruptive event in airport mobility scenario**.

The 5 km ride **takes 7’30” mins**, instead of 20 mins on average by taxi. The vehicles run on their own track at an average height of about 6-7 meters above the ground and each vehicle has a capacity of 50 passengers. The infrastructure **uses 30% of self produced solar power** from photovoltaic panels.



E-car Sharing



The working shifts of Airport community staff start early and end late, often when the public transport service is off duty.

To help them and also cover most possible mobility need, **240 minutes a year (20' a month) of electric car-sharing are made available included in the season ticket.** Additional minutes will be paid 0,20 €/min.

Bologna CORRENTE car sharing system has over 350 vehicles fully electric available in the city. Some stalls are **always available at Bologna airport parking areas**, at walking distance from the Terminal.





Costs & Next Steps

Costs:

the cost of the season ticket is **much less than the algebraic sum of the different tickets.**

To make it very affordable and encourage the behavioral change, also Bologna Airport paid part of the costs for its employees. The "gentle push" to consider and embrace more sustainable transport habits **will reduce carbon footprint and also make available more parking stalls for passengers.**

Next steps:

- inclusion into the "bundle" of other different transport modes like bike-sharing and taxi, to complete the modal offer;
- make the pilot data available for competent governmental bodies and transport operators involved to study a MaaS offer for citizens and tourists.



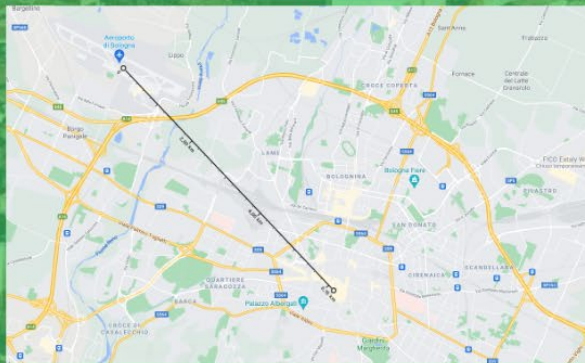
**Bike Sharing
Revolution**



Bologna Airport Cycling strategy

Bologna Airport is very close to the city centre. This is an opportunity in terms of multimodal transport: the network of networks operating in the city is wide and frequent: the **airport is easy to reach, even without car.**

Cycling is strongly encouraged, but the construction of dedicated cycle lanes will be an important step ahead.



EuroVelo7
"Sun Route"



Local
Decarbonisation
Agreement

Bike to
work



EuroVelo7 "Sun Route"



EuroVelo7 (EV7), named the **Sun Route**, is a **7,409 km** (4,604 mi) long EuroVelo long-distance cycling route running north–south through the whole of Europe from the North Cape in Norway to the island of Malta in the Mediterranean Sea.

The route passes through nine countries, and from north to south these are: Norway, Finland, Sweden, Denmark, Germany, Czech Republic, Austria, Italy, Malta.

In Italy it runs through the cities of Verona, Mantua, **Bologna**, Florence, Grosseto, Civitavecchia, Rome, Latina, Naples, Salerno, Reggio Calabria, Messina and Siracusa in Sicily.

Bologna Airport committed to build the cycle lanes in airport surroundings, linking the airport itself with the city center and with EuroVelo7.



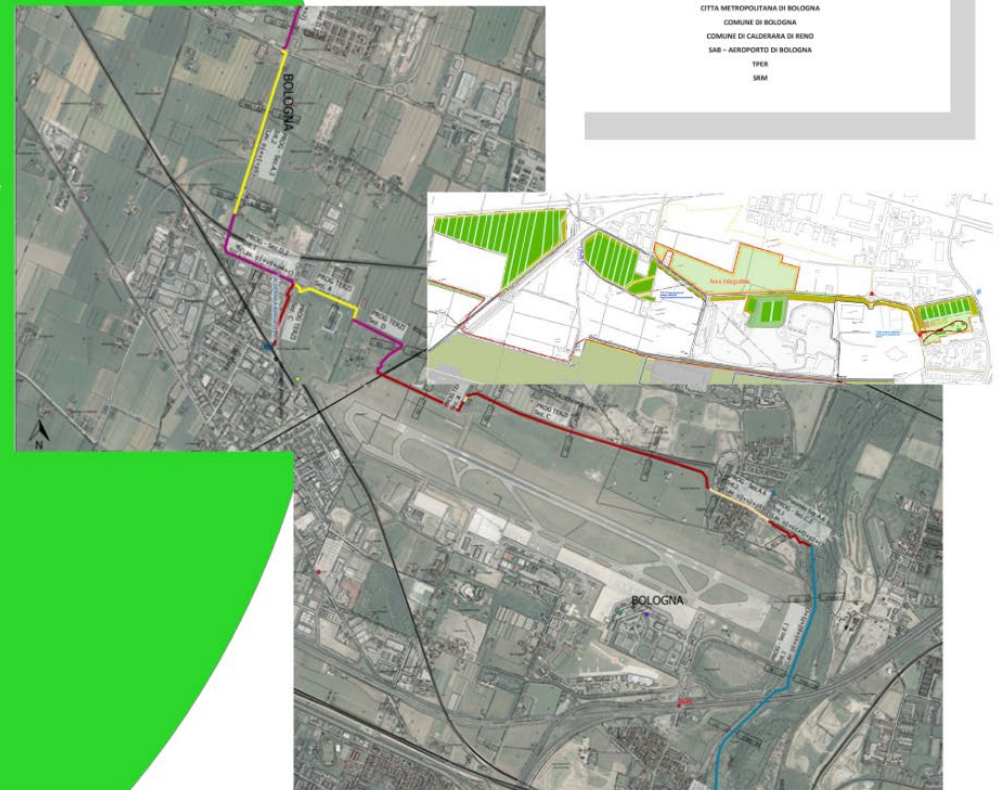
An aerial photograph of a town with red-tiled roofs and a church spire, set against a backdrop of green hills and a cloudy sky. A large, solid green circle is centered over the town, containing the title text. A blue semi-circle is visible in the top left corner of the image.

Local Decarbonisation Agreement

The cycle paths foreseen in the Northern area of the Airport, within a 40-hectares Green Belt to be created, and in the South-East side are key connections to grant the link between existing parts of EuroVelo7 (Sun Route) and to connect Bologna city center.

The cycle lane system will offer a **safe daily journey to all workers and the possibility for bike tourists to "enter" the EuroVelo7** heading North or South for sustainable holidays.

The total length of the lanes is about 8 km. Studies are ongoing to use recycled plastic to build part of the lanes, in a **circular economy perspective**.



An aerial photograph of a dense urban neighborhood, likely in a Mediterranean or European city, characterized by terracotta roofs and multi-story buildings. A large, semi-transparent yellow circle is centered over the image, containing the text "Bike to work". A green triangular shape is visible in the top-left corner.

Bike to work

The acceptance of the "bike to work" was investigated through the home-work survey. Only **40% of the interviewed declared the availability to use bike to commute**. They highlighted the need of parking infrastructure at airport premises and safe cycle lanes.

Bologna Airport encourages the "bike-to-work" and planned the **creation of bike parking lots**, in parallel with the commitment taken for **cycle lanes**.

Recently, the implementation of a national protocol at local level, signed by our Mobility Manager with the Municipality of Bologna, foresees:

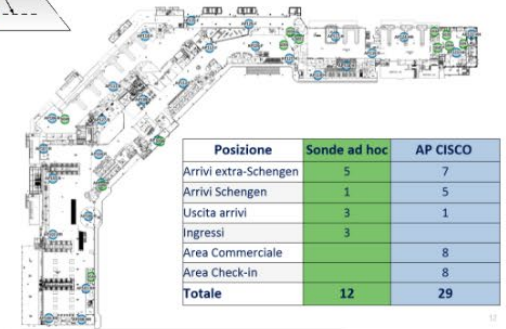
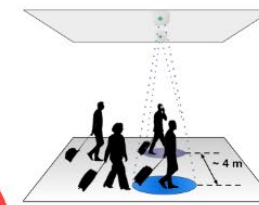
- incentives of **0,20 €/km till max 50 € a month**;
- reduced bike sharing annual pass;
- reduced parking at bike station in Bologna.



Bologna Airport Wifi Location Management System

Cooperation between Bologna Airport and Marconi Labs to collect and **analyse anonymous wifi data to understand passengers' behaviour.**

Wifi sensors are both inside and outside the terminal so to allow to collect data about **passengers' mobility habits, heading or leaving the airport.** Ongoing cooperation with ICOOR - Interuniversity Consortium for Optimization and Operation Research to **develop a predictive algorithm related to transport needs**, thanks to the integration with flights operational data.



Thank you for your attention.

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